

ABSTRACT

A centrifuge bowl for separating heavier particles from lighter particles and water comprises a first conical bowl wall leading to a pair of annular recesses at actually spaced positions. Each recess is generally V-shaped with an upper side wall, a lower side wall and a base. The base contains a plurality of angularly spaced discharge ducts each having a pinch valve by which it can be closed and mouth projecting through the base into the interior of the bowl for collecting the heavier particles. Each recess includes injection openings in the upper and lower side walls of the recess arranged to inject fluidizing water in a direction generally parallel to the base and across the mouth of each discharge duct. An insert member formed by two annular screens can be inserted into the recess radially inwardly of the discharge and injection holes and contains a bed of beads which act to float inwardly while the valves are closed and to collapse outwardly when the valves are opened.